

REMARKS

Claims 1-21 were considered in the Office Action mailed May 12, 2006.

Claims 13-16 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for use of the term "separation element."

Claims 1, 3, 5, 7-8, 10, 12-13, 15 and 17-21 stand rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,896,611 to Haaga ("Haaga").

Claims 2, 4, 6, 9, 11, 14 and 16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Haaga.

Claims 1-2, 17 and 20-21 under § 103(a) as unpatentable over U.S. Patent Publication No. 2003/0028982 ("Kress"), in view of U.S. Patent No. 6,918,155 to Yacobi ("Yacobi").

1. **Section 112 Rejection:** Claims 13-16 have been amended to change "separation element" to "overriding coupling." Withdrawal of the pending §112 rejection is respectfully requested.

2. **Section 102 and 103 Rejections Based on Haaga:** The Applicant respectfully traverses the rejection of claims 1, 3, 5, 7-8, 10, 12-13, 15 and 17-21 as anticipated by Haaga, and of claims 2, 4, 6, 9, 11, 14 and 16 as unpatentable over this reference.

Haaga, one of the patents of the present inventor and discussed in the Background section of the present Specification, is directed to a sweeping machine which has two circular brooms and a cylindrical broom. Haaga at 1:8-33 Figs. 1, 2; (illustrating and describing, consistent with the use in the art,

circular brooms as rotating with generally axial bristles, and a cylindrical broom as rotating with generally radial bristles).

The pending Office Action maintains Haaga teaches that “in addition to the motor drive for the brooms there is also a driving means to transfer driving forces derived from forward motion of the sweeping machine to the circular brooms (col. 5, lines 22-54)” and “means for automatically interrupting a connection between the motor drive and the driving means (a power switch for turning the power on and off).” May 12, 2006 Office Action at 2-3.

As first matter, the Applicant respectfully draws the Examiner’s attention to the first sentence of the cited passage, which states that “[t]he driving for the *cylinder* broom (21) is derived from the wheels (31). Haaga at 5:22-23 (emphasis added). The only discussion of driving the circular brooms in the 5:22-54 passage is a reference to how the cylindrical broom may be driven while the circular brooms are operating. *Id.* at 5:35-38. Accordingly, neither this section, nor any other portion of the Haaga reference teaches any driving of the *circular* brooms 11, 12 with the wheels 31, 31’.¹

Nor does Haaga teach “means for automatically interrupting a connection between the motor drive and the driving means” – both because there is no

¹ The Office Action refers to Haaga at 5:59-6:13 as teaching an overriding coupling between the driving means and the brooms. May 12, 2006 Office Action at 3. However, as with the previously cited portion of Haaga, this passage refers only to driving the *cylindrical* broom 21, with no connection to the circular brooms even hinted. Moreover, there is no discussion of any sort of overriding coupling, only a description of alternative arrangements of the wheel-to-cylindrical broom belt drives shown in Figs. 3 and 4. Haaga at 5:59-6:13 therefore does not teach or suggest the features of the pending claims for which it is cited.

teaching of *any* connection between the wheel drive for the cylindrical broom with the drive for the circular brooms in the cited portion of Haaga,² and because, even if there were some connection between the brooms' separate drives noted in this section, the mere turning off of power would not constitute "automatically interrupting a *connection* between the motor drive and the driving means, *i.e.*, there is no teaching or suggestion of *disengaging* any drive mechanism upon turning off the power. In fact, if there were a connection between the brooms' drives, in the absence of any suggestion of any sort of disconnection means, turning off power would only result in the electric motor dragging against its brooms, *i.e.*, the sweeping machine would be unusable.

Because Haaga contains no disclosure or suggestion of a drive connection between the cylinder broom's drive (wheels 31, 31') and the circular brooms' (11, 12) drive, and further because there is no disclosure or suggestion of the claimed "means for automatically interrupting a connection between the motor drive and the driving means," the Haaga reference neither anticipates claims 1, 3, 5, 7-8, 10, 12-13, 15 and 17-21 under § 102(b), nor rendered claims 2, 4, 6, 9, 11, 14 and 16 unpatentable under § 103(a). Reconsideration and withdrawal of the pending rejections based on Haaga is respectfully requested.

² Haaga at 4:64-67 refers to rollers 19 at the front of the machine driving the circular brooms 11, 12, at 7:7-12 describes an alternative embodiment in which the cylindrical broom 21 may be driven by one or both of the circular brooms 11, 12, and at 7:13-21 refers to use of electric motors to drive the brooms. None of the Haaga embodiment descriptions, however, contains a single word suggesting that the various alternative driving means are *simultaneously* used (*e.g.*, no suggestion of simultaneous roller *and* electric motor drive of the same broom at the same time), nor is there is any suggestion of any sort of *disengaging* coupling between the circular and cylindrical brooms.

3. Section 10 Rejection Based on Kress and Yacobi: The Applicant respectfully traverses the rejection of claims 1-2, 17 and 20-21 as unpatentable over Kress in view of Yacobi.

Claim 1 recites, *inter alia*, a hand-operated sweeping machine “having two *circular* brooms that are mounted in a front area of the sweeping machine and can be driven to rotate in opposite directions with a motor drive” and “means for automatically interrupting a connection between the motor drive and the driving means.”

Both Kress and Yacobi disclose *cylindrical* broom sweeping machines (Kress cylindrical broom 14 (“sweeping roller 14”); Yacobi cylindrical brooms 38a, 38b (“agitator brushes”). One of ordinary skill in the art would recognize such cylindrical brooms operate inherently different from the circular brooms recited in the present claims, *i.e.*, circular brooms required more complex driving means to enable rotation of the circular brooms from the forward motion of the sweeping machine, something not comparable with the rather simple driving mechanisms used for driving a cylindrical broom. Thus, teachings regarding cylindrical broom drives are not suggestive to those of skill as to more complicated circular broom drives.³

Further, like Haaga, Kress and Yacobi do not show “means for automatically interrupting a connection between the motor drive and the driving means.” Neither Kress nor Yacobi teaches *any* device for disconnecting a drive

³ For clarity, the Applicant has amended the independent claims to recite a “circular broom” sweeping machine.

from a broom (*i.e.*, teaches any means for “interrupting a *connection* between a motor drive and the cylindrical broom”), rather both references teach fixed drive arrangement for their respective brooms. And as noted above, merely turning off power does not nothing more than stop the cylindrical broom; no *connection* is interrupted.

Because no combination of Kress and Yacobi teaches or suggests all the features of the present invention recited in claims 1-2, 17 and 20-21, these claims are patentable over Kress and Yacobi under § 103(a). Reconsideration and withdrawal of the pending § 103(a) rejection based on Kress and Yacobi is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicant submits that Claims 1-21 are in condition for allowance. Early and favorable consideration and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

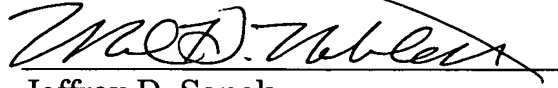
If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit

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Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Jeffrey D. Sanok", written over a horizontal line.

Jeffrey D. Sanok
Registration No. 32,169
Mark H. Neblett
Registration No. 42,028

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844